

In accordance with the present response, applicants submit herewith a substitute amended heading of the original patent correctly listing the "July 17, 1997" date of Japanese Priority Application No. 9-192795.

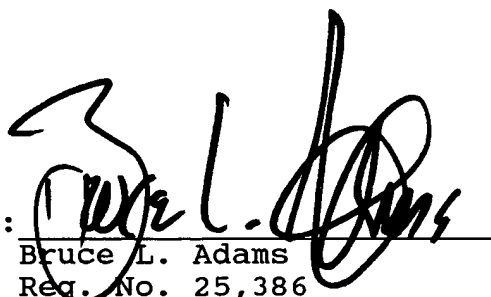
In view of the foregoing, applicants respectfully submit that the objection to the amended heading of the original patent has been overcome and should be withdrawn.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance. Accordingly, favorable reconsideration and allowance of the application is most respectfully requested.

Respectfully submitted,

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MAILING CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner of Patents & Trademarks, Washington, D.C. 20231, on the date indicated below.

  
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Attorney Name

Signature

OCTOBER 21, 2002

Date

**United States Patent** [19]  
**Odagiri et al.**

[11] Patent Number: **5,905,460**  
[45] Date of Patent: **May 18, 1999**

[54] **WRIST WATCH TYPE GPS RECEIVER**

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[73] Assignee: Seiko Instruments Inc., Japan

[21] Appl. No.: 08/918,200

[22] Filed: Aug. 25, 1997

[30] **Foreign Application Priority Data**

September 18, 1996 [JP] Japan.....8-245889

March 25, 1997 [JP] Japan.....9-072265

July 17, 1997 [JP] Japan.....9-192795

[51] Int. Cl.<sup>6</sup> ..... G01S 5/02

[52] U.S. Cl. .... 342/357; 701/213

[58] Field of Search ..... 342/357, 352;  
701/213

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

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5,627,548 5/1997 Woo et al. .... 342/357  
5,731,757 3/1998 Layson, Jr. .... 340/573

Primary Examiner—Mark Hellner  
Attorney, Agent, or Firm—Adams & Wilks

[57] **ABSTRACT**

The system includes an antenna posture detecting device for detecting an antenna posture condition where it is apparently impossible to receive the wave, and a received signal operation controlling device for temporarily interrupting the wave receiving operation, in the case where it is impossible for the antenna to receive the wave, until the wave receiving operation is again possible. The system may include a body movement detecting device for detecting an action of the user; an action judgement device for judging the action of the user on the basis of an output signal of the body movement detecting device; a signal receiving operation controlling device for controlling a signal receiving operation of the GPS receiving device from the judgement result of the action judgement device; a moving distance calculating device for calculating a moving distance of the user on the basis of an output signal of the body movement detecting device during a period of time when the GPS signal receiving operation is interrupted; and an alarm device for receiving a wave of a GPS receiving antenna on the basis of an output signal of the moving distance calculating device and for giving an alarm to the user for a position where it is easy for the GPS receiving antenna to receive the wave.

17 Claims, 10 Drawing Sheets

